

# Respiratory Syncytial Virus (RSV)

May 21, 2022

**In news-** According to a new estimate published in The Lancet, lower respiratory infection attributable to respiratory syncytial virus (RSV) was responsible for more than 1,00,000 deaths in children under five worldwide in 2019.

## **Key findings of the study-**

- The recent **study is the first to examine RSV disease burden in narrow age brackets.** For example, there were over 45,000 deaths in infants under six months old in 2019, with one in five of the total global cases of RSV occurring in this age group.
- Its updated estimates reveal that children six months and younger are particularly vulnerable, especially with cases surging as Covid-19 restrictions are easing around the world and the majority of the young children born in the last two years have never been exposed to RSV (and therefore have no immunity against this virus).
- With numerous RSV vaccine candidates in the pipeline, our estimates by narrower age ranges help to identify groups that should be prioritised, including pregnant people.
- These findings are broadly consistent with previous estimates from a 2015 study, which placed the number of annual cases of RSV in children up to five years old at 3.3 crore, resulting in 1,18,200 overall deaths.
- In 2019, too, there were 3.3 crore RSV-associated acute lower respiratory infection episodes in children under five years old, leading to 26,300 in-hospital deaths, and 1,01,400 RSV-attributable deaths overall. This accounts for 2% of annual deaths from any cause in this age range.
- Globally, only 26% RSV-associated deaths occur in a

hospital. This is particularly apparent in low- and middle-income countries, where the in-hospital case-to-fatality ratio for children under five is 1.4%, compared to 0.1% in high-income countries.

- Overall, 97% of RSV deaths in children under five occurred in low- and middle-income countries.

### What is respiratory syncytial virus (RSV)?

- RSV is the most **common cause of acute lower respiratory infection in young children.**
- It is a seasonal illness that has been commonly overlooked even though it affects about 97% of children by the age of two.
- This is because the symptoms are similar to that of the common cold and are normally mild.
- But for some, RSV can be severe and even life threatening. Severe RSV can be unpredictable.
- The elderly and adults with chronic conditions or weakened immune systems are at high risk for developing severe RSV.
- People do not form long-lasting immunity to RSV and can become infected repeatedly over their lifetime.
- RSV is **spread from person to person through close contact with someone who is infected via secretions** from coughing and sneezing or touching objects such as toys or doorknobs that have the virus on them.
- It **takes between two and eight days from the time of exposure for someone to become ill.**
- The illness normally lasts three to seven days, and it is during this time that those infected are most contagious.
- Most children contract RSV before age two simply because of contact with other children. Being in crowded places with people who may be infected or having exposure to other children or siblings who may be infected are common ways to pick up the virus.